

# NORTHERN LIGHTS ELECTRIC COOPERATIVE—COST OF SERVICE AND RATE DESIGN PROJECT

Northern Lights, Inc (NLI) is a member-owned rural cooperative that serves customers in Idaho, Montana, and Washington. NLI provides service to 15,000 electric customers through more than 2,600 miles of distribution lines. NLI selected EES Consulting to complete a cost of service and rate design study to review the impacts of rising electric costs and the Bonneville Power Administration (Bonneville) rate increase(s).

NLI must follow specific guidelines for establishing its annual revenue requirement, modified debt service coverage ratios, and other financial procedures particular to cooperatives and rural utilities receiving federal loans for financing improvements. EES Consulting developed an automated cost of service computer model that was customized to meet the needs of NLI's particular requirements for estimating its annual costs, including power supply costs, over a five-year study period.

NLI receives most of its power supply from Bonneville through a contract arrangement with PNGC. In addition, NLI has two generating resources and an additional power supply contract. The model developed to estimate NLI's annual costs was designed to provide a detailed forecast of power supply costs and loads from the various sources supplying power to NLI over the study period.

Once the annual revenue requirement was determined, the costs were functionalized and classified based on the current plant investment. Costs were then allocated to customers based on forecasted load data representing each customer class's use of the system. Some costs were directly assigned to customers who had facilities dedicated to their use.

The revenue requirement for the test period showed that NLI would require a significant initial rate increase. As Bonneville and PNGC changed their rates and rate design, NLI needed to develop rates that would reflect those changes to assure revenue sufficiency and equitable cost recovery from its customers. EES Consulting developed a power cost adjustment clause (PCA) to add to NLI's customer rates to allow the utility to recover the cost of the Bonneville Cost Recovery Adjustment Clause (CRAC) and other power cost adjustment when they were imposed on NLI. The PCA allowed NLI to eliminate its temporary across-the-board rate surcharge and equitably allocate costs to customer based on energy usage.

EES Consulting designed seasonal rates for residential customers, inclining block rates for some non-residential customers and alternative wheeling tariff rates for customers only using primary service. EES Consulting also assisted NLI with industrial customer contract negotiations regarding cost of service and rate design methodology issues.

NLI is governed by a nine person Board of Directors who represent its members. EES Consulting assisted NLI with presenting information to the Board and helped to establish rates that accomplished the goals of the utility, its Board, and its customers.